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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PATTERSON, MARC A

ART UNIT PAPER NUMBER

1772

DATE MAILED: 10/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,234

Applicant(s)

SRIDHARAN ET AL.

Examiner

Marc A. Patterson

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 17-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 30 is objected to because of the following informalities: Claim 30 is dependent on Claim 2, which has been canceled. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 17, 20 – 26 and 29 – 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Zachariades (U.S. Patent No. 4,655,769).

With regard to Claims 17 and 30, Zachariades discloses an apparatus for biomedical application comprising a body portion (prosthesis, therefore suitable for medical device application; column 10, lines 55 – 56); comprising a semi – crystalline polymer (column 6, lines 4 – 6) having a chain – folded crystalline morphology and comprising shish – kebab crystals (column 8, lines 24 – 25) and an oriented fibrillar network structure (column 9, lines 62 – 64) and therefore arrayed in a node of folded lamella and a fibril orientation.

With regard to Claims 20 – 21 and 23 – 26, the polymer disclosed by Zachariades comprises ultra – high molecular weight polyethylene (column 5, lines 34 – 37) and therefore comprises a polyalkylene polymer, and comprises fibrils, as stated above, and therefore comprises fibers; the polymer is comprised in a film (column 9, line 38).

With regard to Claims 22 and 29, the polymer disclosed by Zachariades has a node and fibrillar structure, as stated above, and therefore has an auxetic property.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zachariades (U.S. Patent No. 4,655,769) in view of Pinchuk (U.S. Patent No. 5,226,913).

Zachariades disclose ultra high molecular weight polyethylene for biomedical application as discussed above. With regard to Claims 18 and 27, Zachariades fails to disclose a biomedical application comprising a catheter balloon.

Pinchuk teaches the use of ultra high molecular weight polyethylene (column 7, lines 21 – 22) in a catheter balloon (balloon for a catheter; column 3, lines 13 – 16) for the purpose of obtaining a catheter balloon that is maneuverable (column 3, lines 1 – 2). One of ordinary skill in the art would therefore have recognized the advantage of providing for the catheter balloon of Pinchuk in Zachariades, which comprises ultra high molecular weight polyethylene, depending on the desired maneuverability of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a biomedical application comprising a

catheter balloon in Zachariades in order to obtain a catheter balloon that is maneuverable as taught by Pinchuk.

6. Claims 19 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zachariades (U.S. Patent No. 4,655,769) in view of Merrill et al (U.S. Patent No. 6,509,098 B1).

Zachariades disclose ultra high molecular weight polyethylene film for biomedical application as discussed above. With regard to Claims 19 and 28, Zachariades fails to disclose a film having dimensions suitable for a graft.

Merrill et al teach the grafting (column 4, lines 65 – 67) of ultra high molecular weight polyethylene (column 5, lines 20 – 24) for the purpose of obtaining a wettable surface (column 5, lines 1 – 3). One of ordinary skill in the art would therefore have recognized the advantage of providing for the grafting of Merrill et al in Zachariades, which comprises ultra high molecular weight polyethylene, depending on the desired wettability of the end product.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for grafting, and therefore a film having dimensions suitable for a graft, in Zachariades in order to obtain a catheter balloon that is wettable as taught by Merrill et al.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marc Patterson 10/2/05
Marc A. Patterson, PhD.
Examiner
Art Unit 1772